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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	
First Inventor	John David Heinzmann
Title	Model-Based Fault Detection in a
Express Mail Label No.	EV 333082310 US

APPLICATION ELEMENTS	ADDRESS TO: Mail Stop Patent Application Commissioner for Patents E- RO Pay 1450				
See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: P.O. Box 1450 Alexandria VA 22313-1450				
1. X Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27. 3. X Specification [Total Pages 18] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 6] 5. Oath or Declaration [Total Sheets 3] a. X Newly executed (original or copy) b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. X Application Data Sheet. See 37 CFR 1.76	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Reader Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. Paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) 11. English Translation Document (if applicable) 12. X Information Disclosure X Copies of IDS Statement (IDS)/PTO-1499 Citations 13. Preliminary Amendment 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other:				
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:					
Continuation Divisional Continuat	ion-in-part (CIP) of prior application No.:				
Prior application information: Examiner Art Unit: For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.					
	DENCE ADDRESS				
X Customer Number:	OR Correspondence address below				
Name 002101					
Address PATENT TRADEMARK OFFICE					
City	State Zip Code				
	elephone Fax				
Name (Print/Type) John L. Conway	Registration No. (Attorney/Agent) 48,241				

This collection of information is equired by 37 CFR 1.5 (b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 790.00

Complete if Known				
Application Number				
Filing Date	July 23, 2003			
First Named Inventor	John David Heinzmann			
Examiner Name	Not Assigned			
Art Unit	Not Assigned			
Attornov Docket No.	1062/D20			

METHOD OF PA		FEE CALCULATION (continued)					
X Check Credit cal	rd Money Other None	3. ADDITIONAL FEES					
X Deposit Account:	— Order — —		Entity	1		•	
Deposit Deposit		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account Number	19-4972	1051	130	2051	65	Surcharge - late filing fee or oath	Fee Falu
Deposit Account BRO	MBERG & SUNSTEIN	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
Name Land	orized to: (check all that apply)	1053	130	1053	130	Non-English specification	
Charge fee(s) indicated	— · · · · · · · · · · · · · · · · · · ·	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	<u> </u>
I≓5 ° '′	e(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to	
	pelow, except for the filing fee	I .	1 040*	1005	1,840*	Examiner action Requesting publication of SIR after	
to the above-identified depos	•	1805	1,840*	1005	1,040	Examiner action	
FFF	CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE		1252	410	2252	205	Extension for reply within second month	
Large Entity Small Entity		1253	930	2253	465	Extension for reply within third month	<u> </u>
Fee Fee Fee Fee Code (\$)	<u>Fee Description</u> Fee Paid	1254	1,450	2254	725	Extension for reply within fourth month	
1001 750 2001 375	Utility filing fee	1255	1,970	2255	985	Extension for reply within fifth month	<u> </u>
1002 330 2002 165	Design filing fee 750.00	1401	320	2401	160	Notice of Appeal	
1003 520 2003 260	Plant filing fee	1402	320	2402	160	Filing brief in support of an appeal	
1004 750 2004 375	Reissue filing fee	1403	280	2403	140	Request for oral hearing	
1005 160 2005 80	Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
	SUBTOTAL (1) (\$) 750.00	1452	110	2452	55	Petition to revive - unavoidable	
		1453	1,300	2453	650	Petition to revive - unintentional	
2. EXTRA CLAIM FE	ES FOR UTILITY AND REISSUE Fee from	1501	1,300	2501	650	Utility issue fee (or reissue)	
	Extra Claims <u>below</u> Fee Paid	1502	470	2502	235	Design issue fee	
Independent	20** = 0 × = 0	1503	630	2503	315	Plant issue fee	
Claims ————————————————————————————————————	3** = 0 x = 0	1460	130	1460	130	Petitions to the Commissioner	
Multiple Dependent	L = <u></u>	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Enti		1806	180	1806	180	Submission of Information Disclosure Stmt	<u> </u>
Code (\$) Code (\$)	9 Claims in excess of 20	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
, , , , , , , , , , , , , , , , , , , ,	12 Independent claims in excess of 3	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 280 2203 14	, , , , , , , , , , , , , , , , , , , ,	1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1204 84 2204 4	Reissue independent claims over original patent	1801	750	2801	375	Request for Continued Examination (RCE)	
1205 18 2205	9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	
SUBTOTAL (2) (\$) 0.00		Other	fee (sp	ecify)_			
	aid, if greater; For Reissues, see above	*Red	uced by	Basic	Filing F	ee Paid SUBTOTAL (3) (\$)	40.00

SUBMITTED BY				(Complete	e (if app <u>licable)</u>
Name (Print/Type)	John L. Conway		Registration No. (Attorney/Agent) 48,241	Telephon	e 617-443-9292
Signature	John Con	\overline{Z}		Date	July 23, 2003

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De included on this form. Provide credit card information and authorization of P10-2036.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: John David Heinzmann, John B. Morrell and Jason M. Sachs

Application No.: Not Assigned

Group No.: Not Assigned

Filed: 07/23/2003

Examiner: Not Assigned

For: Model-Based Fault Detection in a Motor Drive

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

EXPRESS MAIL CERTIFICATE

"Express Mail" label number EV 333082310 US Date of Deposit 07/23/2003

I hereby state that the following attached paper or fee

New Utility Patent Application, including transmittals and documents referenced therein

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

John L. Conway

Signature of person mailing paper or fee

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